

EXECUTIVE SUMMARY
AIRCRAFT ACCIDENT INVESTIGATION
MQ-1L, "PREDATOR," S/N 03-3109
CREECH AIR FORCE BASE, NEVADA
22 JUNE 2006

On 22 June 2006, at 1336 hours local time, a MQ-1L Predator, S/N 03-3109, crashed at Creech Air Force Base, Nevada.

The mishap aircraft (MA) was assigned to the 757th Aircraft Maintenance Squadron, 57th Wing, Nellis Air Force Base, Nevada, and flown by the 11th Reconnaissance Squadron, 57th Wing, Creech Air Force Base, Nevada. The wreckage was recovered at the impact site. There were no injuries or fatalities from the accident. Upon impact, the MA was damaged beyond economical repair. Other than the loss of the aircraft, valued at \$4,700,000, there was no damage to government or private property.

Approximately five minutes after takeoff during a training mission, the MA's engine experienced a rapid loss of engine oil followed by an engine failure. This sudden loss of engine power coupled with the aircraft's low altitude prohibited the safe recovery of the MA. To ensure the safety of ground personnel, the mishap pilot (MP) elected to impact the MA into a high terrain area near the runway.

The primary cause of this accident, supported by clear and convincing evidence, was the rapid loss of oil in the engine oil system due to a loose oil filter. The oil filter was installed on 7 June 2006 during a 60-hour engine inspection. The sudden loss of oil from the loose oil filter led to engine power loss and combined with the aircraft's low altitude, prohibited the safe recovery of the MA.

The Board could not determine the precise cause for the loose oil filter. Technical order guidance requires the oil filter's seal to be lubricated with oil and then installed "hands tight". It is most likely that the aircraft's oil filter was not installed in accordance with this technical guidance.

A contributing factor to this mishap, supported by substantial evidence is the lack of mechanical markings or locking mechanisms on the oil filter location itself to ensure proper installation. While the current installation of the MA's oil filter is a straight forward procedure, given the catastrophic consequences of an improperly installed filter, an oil filter should have been designed that locks in-place or has visible marks to ensure proper installation.

Under 10 U.S.C. 2254(d), any opinion of the accident investigators as to the cause of, or the factors contributing to, the accident set forth in the accident investigation report may not be considered as evidence in any civil or criminal proceeding arising from an aircraft accident, nor may such information be considered an admission of liability by the United States or by any person referred to in those conclusions or statements.